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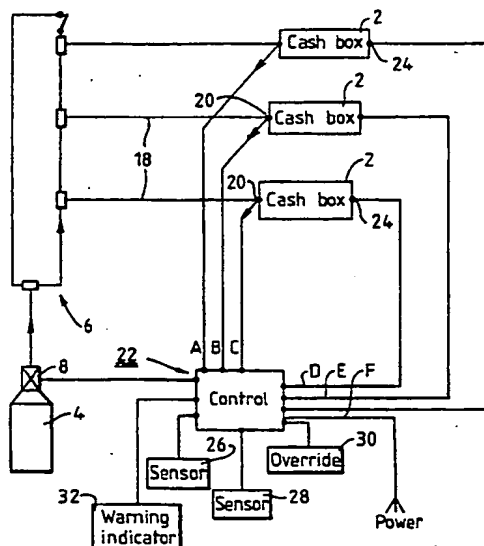
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GB 1450397 A EP 0473471 A1 EP 0347091 A2
EP 0277679 A1 EP 0241322 A1 EP 0232632 A1
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(58) Field of Search
UK CL (Edition L) E2X
INT CL⁵ G08B

(54) Security of paper items

(57) A security system is received within the housing of an ATM having containers (2) in which bank notes are stored prior to being dispensed to the public. The system comprises a canister (4) containing a dyestuff under pressure and a hydraulic circuit (6) for discharging the dyestuff into the containers (2). A control circuit (22) is arranged to produce a control signal to actuate a valve (8) of the canister (4) upon the sensing of the existence of an alarm condition by sensors (26, 28). The first sensor (26) is arranged to detect physical movement of the ATM, for example, if the ATM is ripped out of a supporting structure. The second sensor (28) is a vibration detector and arranged to detect attempts to drill or break into the housing of the ATM in situ. The security system may not prevent an ATM from being pulled out of a wall and transported away. However, this action will cause the bank notes to be dyed and therefore renders them unusable. The existence of the security system should therefore act as a deterrent.

FIG. 1



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

The print reflects an assignment of the application under the provisions of Section 30 of the Patents Act 1977.

GB 2 269 205 A

FIG. 1

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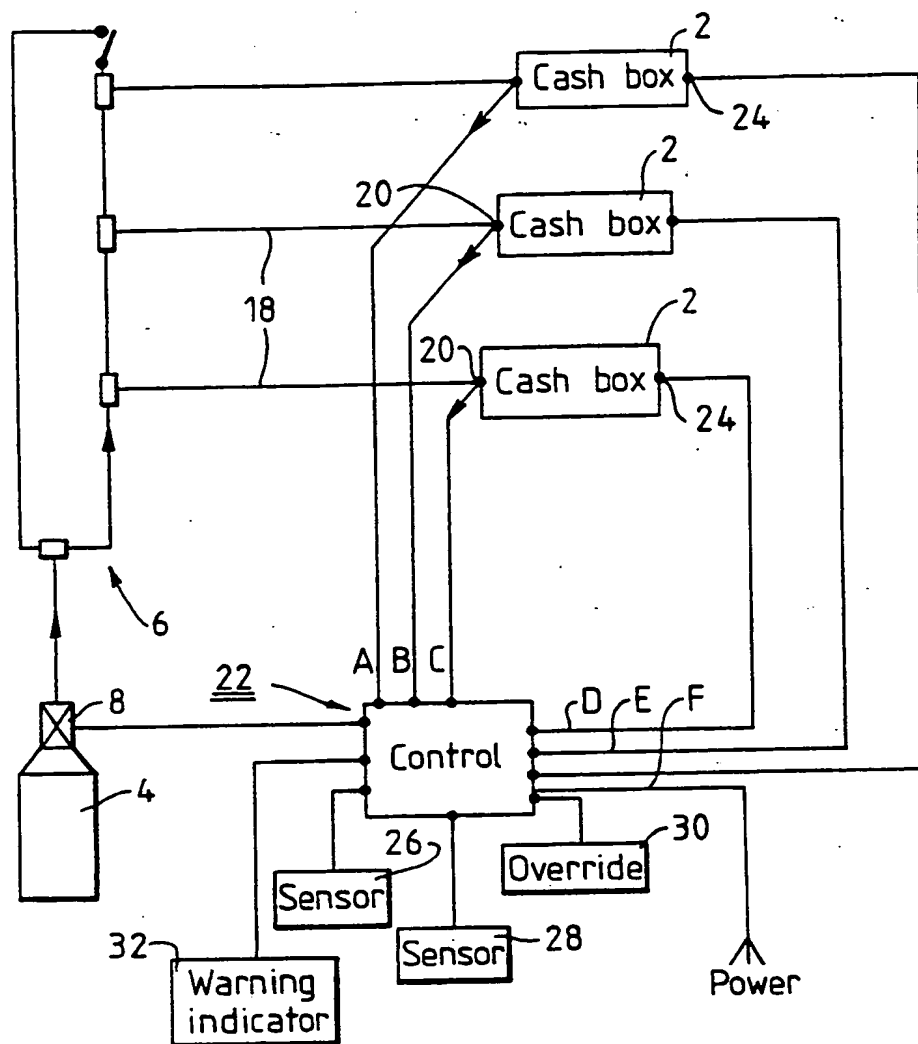
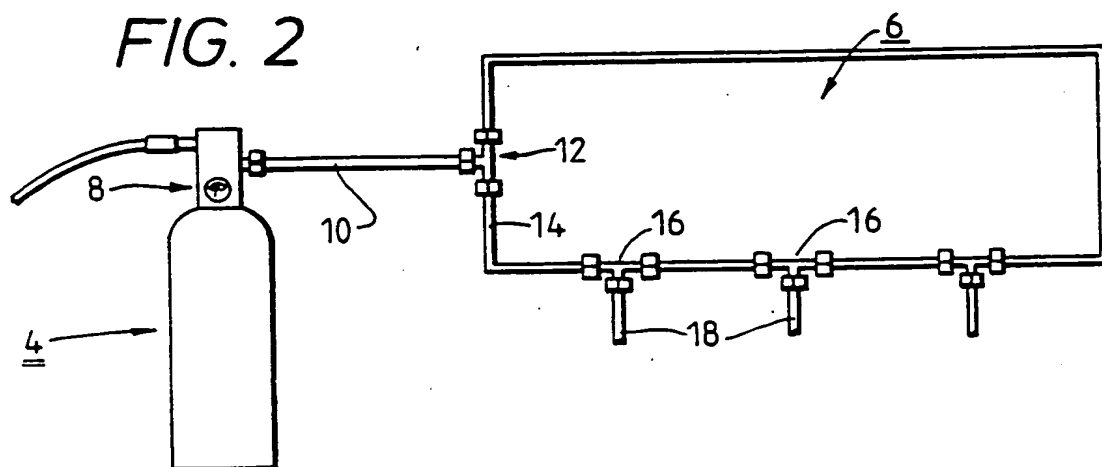


FIG. 2



IMPROVEMENTS IN OR RELATING TO THE SECURITY OF PAPER ITEMS

The present invention relates to a method of securing paper items, a security system for containers for storing
5 paper items, and to a protected container for storing paper items.

Traditionally, valuable paper items such as vouchers, bonds and bank notes have been protected by storing them in
10 secure containers such as safes, cash boxes and the like. However, recently thieves have been more willing to transport the secure container away from its normal location so that it can be opened at their leisure. A particular problem has arisen in respect of automated
15 teller machines (ATMs) which store bank notes to be dispensed to the public. There have been increasing numbers of incidents in which such machines have been forcibly removed from the walls of buildings and other supporting structures and transported away together with
20 their contents.

The traditional approach to securing bank notes and other valuables has been to make the container more secure, stronger, and heavier and to increase the strength and
25 security of its fixing to a supporting structure. However, with the use of heavy plant machinery it is still possible to remove and transport such containers away from their supporting structure.

30 The present invention seeks an alternative approach to the securing of containers for valuable paper items which will frustrate thieves who wish to remove and transport the secured container.

35 According to a first aspect of the present invention there is provided a method of securing paper items, where

the paper items are kept in one or more containers, the method comprising the steps of sensing the existence of an alarm condition, and, in response to the existence of an alarm condition, operating electrical means to cause the
5 supply of dyeing medium to the interior of each container in which paper items are kept.

The paper items which are to be secured by a method of the invention may be coupons, vouchers, bonds and/or any
10 other paper items which have a value and are therefore subject to the attentions of thieves. However, in most cases, the paper items to be secured will be bank notes.

In accordance with an embodiment of the invention, the
15 sensing of the existence of an alarm condition causes the supply of dyeing medium to the interior of the container(s) in which the paper items are kept such that the paper items are dyed thereby. This renders the paper items difficult, if not impossible, to utilise. If the thief tries to use
20 the dyed paper items, their condition helps to point to the dishonesty of the person handling them, and hence aids in the capture of wrongdoers. Perhaps more importantly, the fact that a container is secured by a method of the invention will act as a deterrent.

25 The container or containers in which paper items to be secured by a method of the invention are kept may constitute, or may be housed in, a safe, a cash box, an ATM, or any other protected container.

30 In an embodiment of the invention, the alarm condition whose existence is sensed may be an indication that the container(s) or a housing therefor are being removed or otherwise tampered with. For example, the sensed alarm
35 condition may be vibration and/or movement of the container, container(s) or their housing, and/or may be the

disconnection of a physical connection between the container(s) or their housing and a supporting structure. Additionally and/or alternatively, the sensed alarm condition may be other environmental disturbances of, or
5 proximate to, the container(s) or their housing. For example, excess heat or noise, which may be indicative of a physical attack on the container(s) or their housing, may be sensed.

10 The dyeing medium supplied to the interior of the or each container may be any suitable dyeing medium. For example, the dyeing medium may be in a fluid state. Preferably, the dyeing medium is a foam which has been kept under pressure such that upon supply to the interior of the
15 container(s) it seeks to increase in volume.

In a preferred embodiment, the dyeing medium comprises a dyestuff mixed with a detergent based foam.

20 The invention also extends to a security system for at least one container for storing paper items, said security system comprising at least one canister containing a dyeing medium, electrically operable means for controlling the supply of dyeing medium from the canister to a dyeing
25 medium output, means for communicating said dyeing medium output to the interior of one or more containers for storing paper items, and control means for operating said electrically operable means, said security system further comprising control means for sensing the existence of an
30 alarm condition, and arranged in response to the existence of an alarm condition to operate said electrically operable means whereby dyeing medium is supplied via said dyeing medium output to the interior of said container(s).

35 The paper items which are to be secured may be any paper items. Generally the paper items will be valuable,

such as coupons, vouchers, bonds or bank notes.

The dyeing medium is preferably a fluid dyestuff or a fluid containing dyestuff. Preferably, the fluid is
5 contained within the canister under pressure.

The electrically operable means for controlling the supply of dyeing medium to the dyeing medium output may be constituted by any means for controlling the supply. Where
10 the dyeing medium is fluid the electrically operable means may, for example, comprise an electrical pump.

In a preferred embodiment, where the dyeing medium is a fluid contained in said canister under pressure, said
15 electrically operable means is preferably an electrically operable control valve provided in the outlet of the canister to control the supply of the dyeing medium from said outlet. The electrically operated valve, for example, may be a solenoid operated valve. Preferably, the valve is
20 normally closed, and is openable by the application of an electrical control signal thereto.

The control means may be implemented in any appropriate manner. Generally the implementation of the
25 control means will depend upon the nature of the control required by the electrically operable means, and upon the nature of the alarm condition to the existence of which the control means is to be responsive. In a sophisticated system, for example, a plurality of sensors may be
30 provided, and the control means may comprise microprocessing means. Additionally and/or alternatively, the control means may comprise logic circuits responsive to sensors, and/or arranged to generate appropriate control signals upon the detection of one or more predetermined
35 conditions signifying the existence of an alarm condition.

In an embodiment, the security system further comprises one or more sensors for sensing the existence of one or more alarm conditions. For example, the movement of the or each container from a predetermined location may
5 signify the existence of an alarm condition, and such movement can be sensed in many ways. In a simple system, for example, having a single relatively portable container, a movement sensor may comprise a microswitch or other pressure operated switch on the base of the container.
10 Generally, the weight or location of the container would be arranged to keep the switch closed, and opening of the switch, for example, on the lifting of the container off a support surface, would be taken to indicate the existence of an alarm condition.

15

Additionally and/or alternatively, a movement sensor may comprise a mechanical connection having male and female parts carried respectively by the or each container or a housing therefor, and by a supporting structure for the or
20 each container or the housing. For example, a housing for the or each container may carry a male plug which, when the housing is in its normal location, is received within a female socket in a supporting structure for the housing. The plug will be removed from the socket upon removal of
25 the housing from its supporting structure. Sensing of the disconnection is used to indicate the existence of an alarm condition.

The existence of an alarm condition may additionally
30 and/or alternatively be sensed by appropriate vibration or movement detectors provided on the or each container or on a housing therefor. Other conditions which may be sensed as indicating the existence of an alarm condition may be the existence of high temperatures and/or excess noise at
35 or in the vicinity of the container(s) or of a housing therefor.

In a preferred embodiment, the control means may also be arranged to be responsive to the status of the security system and arranged either to generate warning indicators and/or to inhibit the operation of said electrically operable means. For example, the control means may be arranged to monitor the state of said means communicating the dyeing medium to the container(s) and to inhibit operation of the electrically operable means in the event of a fault. Additionally and/or alternatively, the control means may be arranged to activate warning means, for example, for providing a visual and/or an audible warning.

The warning means may comprise a visual indicator, such as a liquid crystal display or other display means. Additionally and/or alternatively, the warning means may comprise a speech synthesiser or other audible warning means.

According to a further aspect of the present invention there is provided a protected container for storing paper items, said protected container comprising means for connecting the interior of said container to a supply of dyeing medium, and control means arranged to be responsive to the existence of an alarm condition and in response to actuate the supply of dyeing medium to the interior of said container to dye any paper items stored therein.

Preferably, at least one sensor is provided for sensing the existence of an alarm condition, and said control means is coupled to said sensor and arranged to be responsive to the output thereof.

The paper items to be secured may be any paper items, but generally will be valuable paper items, such as coupons, vouchers, bonds or bank notes.

The dyeing medium may be any fluid dyestuff or fluid containing dyestuff. Preferably, however, the supply of said fluid will be pressurised.

5 The control means may be implemented in any appropriate manner. Generally the implementation of the control means will depend upon the nature of the control required, the nature of the supply of dyeing medium, and the nature of the alarm condition(s) to whose existence the
10 control means is to be responsive. In a sophisticated system, for example, the control means may comprise microprocessing means arranged to receive signals from a plurality of sensors. Additionally and/or alternatively, the control means may comprise logic circuits responsive
15 sensor(s) and/or arranged to generate appropriate control signals upon the detection of one or more predetermined conditions signifying the existence of an alarm condition.

20 In an embodiment, the protected container may have one of the connecting parts of a mechanical connector, the other connecting part being provided in an external structure, such as a supporting structure for the protected container. For example, the protected container may carry a male plug which is to be received within a female socket
25 in a supporting structure therefor. The plug will be removed from the socket upon removal of the container from the supporting structure, and opening of the connector may be used to indicate the existence of an alarm condition.

30 The existence of an alarm condition additionally and/or alternatively may be sensed by a variety of other sensors or detectors as defined above.

35 In a preferred embodiment, the control means may also be arranged to be responsive to the status of the protected container and arranged either to generate warning

indicators and/or to inhibit the supply of dyeing medium. For example, the control means may be arranged to monitor said means for connecting the dyeing medium to the interior thereof and to inhibit the supply of dyeing medium in the event of a fault. Additionally and/or alternatively, the control means may activate warning means, for example providing a visual or audible warning.

Embodiments of the present invention will hereinafter be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 shows schematically a security system for a container for storing paper items in accordance with one embodiment of the invention, and

Figure 2 shows a more detailed view of a hydraulic circuit for dyeing medium of the security system of Figure 1.

The embodiment of the security system of the invention illustrated and described below relates to an ATM in which bank notes are stored to be dispensed to users of the machine. However, it will be appreciated that the invention is applicable generally to containers for the protection of paper items, and it will also be appreciated that the invention is not limited to bank notes, but may be used to protect any paper items.

An ATM includes a number of individual containers or cash boxes 2 in which bank notes are stored. These individual containers 2 are housed within a housing (not shown) which defines the protected container, and which carries input and output means such as a keypad, a card reader, and a cash dispensing outlet. Processing means (not shown) for operating the ATM will also normally be provided within the housing.

A security system of the invention is received within the housing of the ATM and comprises a pressurised canister 4 containing a dyestuff under pressure and a hydraulic circuit indicated at 6 for communicating the contents of the canister 4 to the interior of the containers 2. In this respect, the canister 4 has a discharge outlet which is provided with an electrically operated valve 8. This valve 8 may be of any suitable type, but in the illustrated embodiment is a normally closed, solenoid valve which can be opened by the application of an electrical control current thereto. The electrically operated valve 8 controls communication between the interior of the canister 4 and a first hydraulic line 10 of the hydraulic circuit 6.

As is shown in Figure 2, the first line 10 of the hydraulic circuit is connected by way of a tee connector 12 to a further hydraulic line 14. This further line 14 contains a number of further tee connectors 16 in series, each said tee connector 16 having a respective output line 18 connected to a respective container 2. In this respect, the connection between each line 18 and the container 2 may be made by any suitable means, but it is important that the line 18 communicates with the interior of the container 2. Furthermore, it is important to maintain the integrity of each connection and appropriate sensors means 20 (Figure 1) are provided on each line 18 or on the corresponding container 2. The sensor means 20 are arranged to detect leaks and/or pressure changes in the hydraulic connection to each container 2.

An electrical control signal for actuating the output valve 8 can be generated by way of a control circuit 22. It will also be seen that the output of each sensor 20 is connected to the control circuit 22. Similarly, detector means, indicated at 24, are provided in each container 2 and are also connected to the control circuit 22. The

detector means 24 are arranged to identify if bank notes are present in the corresponding container 2 and may, for example, comprise a load cell, pressure switch or other means sensitive to weight or gravity.

5

The control circuit 22 is arranged to produce the control signal to actuate the valve 8 upon the sensing of the existence of an alarm condition by either or both of two sensors 26, 28. The first sensor 26 is preferably
10 arranged to detect physical movement of the ATM, for example, if the ATM is ripped out of a supporting structure. The sensor 26 may be simply configured, for example, as a connector comprising a male jack plug (not shown) connected to and carried by the housing of the ATM
15 which is normally connected into a female socket (not shown) in the supporting structure. Thus, if the ATM housing is moved, the connection is broken and this is used to indicate that movement has taken place. The control circuit 22 can be arranged to react to the disconnection of
20 the plug by providing a control current for the valve 8.

The second sensor 28, for example, may be a vibration detector, and thus arranged to detect attempts to drill or break into the housing of the ATM in situ. As with the
25 sensor 26, a signal from the sensor 28 indicating the existence of an alarm condition is applied to the control circuit 22 which responds by applying a control signal to the valve 8.

30 An override, such as a panic button 30, may also be provided. Pressing the panic button 30 is also arranged to cause the control circuit 22 to apply an electrical control signal to the valve 8.

35 As is clear from Figure 1, the control circuit 22 is connected to a power supply. Preferably the circuit 22 is

powered from the mains and also has a battery back up.. The control circuit 22 is arranged to self test its power supply periodically. An indicator device 32 is connected to, and operable by, the control circuit 22 and can be
5 activated to display a warning if a power self test undertaken by the control circuit 22 indicates a failure or problem of the power supply. The indicator device 32 may be a visual display and/or an audible warning device, and the audible device may include speech synthesising
10 apparatus.

In use, the security system shown in Figure 1 is provided within a normally operational ATM. In this respect, a suitable dyestuff is provided in the canister 4
15 under pressure. The dyestuff may be, for example, DylonTM, and arranged upon opening of the valve 8 to be mixed with a foam contained within the canister 4. Preferably, the foam is detergent based.

20 The control circuit 22 is arranged to continually monitor the condition of the containers 2, and the condition of the hydraulic connections thereto as determined by the sensor means 20 and the detector means 24. If one or more of the containers 2 is empty, the
25 control circuit 22 is arranged to close the appropriate line 18 to that container 2. If any of the detectors 20 indicate that any of the hydraulic lines 18 is leaking or is disconnected, this is signalled to the control circuit 22 which provides an appropriate warning by way of the
30 indicator 32. As stated above, the power to the control circuit 22 is continuously or periodically monitored, and similarly if problems with the power supply are encountered a warning is given.

35 The control circuit 22 is also continually responsive to the condition of the sensors 26, 28 and 30. If the ATM

is tampered with, for example, an attempt is made to rip it from its supporting structure and/or an attempt is made to drill into the housing thereof, one or other of the sensors 26 or 28 will indicate the existence of an alarm condition as described above. Upon receiving an indication of the existence of an alarm condition, the control circuit 22 immediately causes opening of the valve 8 so that a pressurised foam and dye mixture is supplied to the containers 2. In this respect, no dye foam will be applied to any container 2 which has been found to be empty by its detector 24 as the line 18 thereto will have been closed. As the dye foam enters each container 2 it will expand, because of the drop in pressure, and will therefore be effective to wet and dye all of the paper items therein. In this respect, it is possible to use a liquid dyestuff, but more reliable dyeing of the paper items can be achieved using a foam.

The method described above will not generally prevent an ATM from being pulled out of a wall and transported away by appropriately equipped thieves. However, when the wrongdoers open the machine to remove the bank notes they will find that all of them have been dyed and are therefore unacceptable in most outlets. The very existence of the security system should therefore effectively deter most thieves.

It is important to ensure that all of the paper items are reliably dyed, and this is one reason for preventing the application of the dye foam to an empty container 2. In this respect it is necessary to keep the pressure in each line 18 of the system relatively equal for consistent results in each container. It would, of course, be possible to replace the tee connectors 16 shown in Figure 2 with appropriate control valves.

ATM machines are accessible to the staff in the bank or other institution in which the machine is mounted; for example, for the replenishment of bank notes therein. If the staff are subject to a hold up they can activate the security system by activation of the override 30. This
5 override may comprise a panic button, as described above, and/or may be responsive to a transmitted signal.

It will be appreciated that other modifications and
10 variations may be made to the embodiments of the invention as described and illustrated in accordance with the scope of this application.

CLAIMS

1. A method of securing paper items, where the paper items are kept in one or more containers, the method
5 comprising the steps of sensing the existence of an alarm condition, and, in response to the existence of an alarm condition, operating means to cause the supply of dyeing medium to the interior of each container in which paper items are kept.
- 10 2. A method of securing paper items as claimed in Claim 1, wherein the or each container in which paper items to be secured are kept constitutes a safe, a cash box, an ATM, or other protected container.
- 15 3. A method of securing paper items as claimed in Claim 1, wherein the or each container in which paper items to be secured are kept is housed in a safe, a cash box, an ATM, or other protected container.
- 20 4. A method of securing paper items as claimed in any preceding claim, wherein the alarm condition whose existence is sensed comprises an indication that the container(s) or a housing therefor are being removed or
25 otherwise tampered with.
5. A method of securing paper items as claimed in Claim 4, wherein the sensed alarm condition comprises vibration and/or movement of the container, container(s) or their
30 housing, and/or the disconnection of a physical connection between the container(s) or their housing and a supporting structure.
- 35 6. A method of securing paper items as claimed in any preceding claim, wherein the sensed alarm condition comprises environmental disturbances of, or proximate to,

the container(s) or a housing thereof.

7. A method of securing paper items as claimed in Claim 6, wherein the sensed alarm condition comprises excess heat or noise, at or proximate to the container(s) or their housing.

8. A method of securing paper items as claimed in any preceding claim, wherein the dyeing medium supplied to the interior of the or each container is in a fluid state.

9. A method of securing paper items as claimed in Claim 8, wherein the dyeing medium is a foam which has been kept under pressure such that upon supply to the interior of the container(s) it seeks to increase in volume.

10. A method of securing paper items as claimed in Claim 9, wherein the dyeing medium comprises a dyestuff mixed with a detergent based foam.

11. A security system for at least one container for storing paper items, said security system comprising at least one canister containing a dyeing medium, electrically operable means for controlling the supply of dyeing medium from the canister to a dyeing medium output, and means for communicating said dyeing medium output to the interior of one or more containers for storing paper items, said security system further comprising control means for sensing the existence of an alarm condition, and arranged in response to the existence of an alarm condition to cause operation of said electrically operable means whereby dyeing medium is supplied via said dyeing medium output to the interior of said container(s).

12. A security system as claimed in Claim 11, wherein the dyeing medium is preferably a fluid dyestuff or a fluid

containing dyestuff.

13. A security system as claimed in Claim 12, wherein said
fluid of the dyestuff is contained within the canister
5 under pressure.

14. A security system as claimed in any of Claims 11 to
13, wherein said electrically operable means for
controlling the supply of dyeing medium to the dyeing
10 medium output comprises an electrical pump.

15. A security system as claimed in any of Claims 11 to
14, wherein the dyeing medium is, or is contained in a
fluid contained in said canister under pressure, and said
15 electrically operable means is an electrically operable
control valve provided in the outlet of the canister to
control the supply of the dyeing medium from said outlet.

16. A security system as claimed in Claim 15, wherein said
20 electrically operated valve is a normally closed solenoid
operated valve, and is openable by the application of an
electrical control signal thereto.

17. A security system as claimed in any of Claims 11 to
25 16, wherein said control means comprises a plurality of
sensors for sensing the existence of alarm condition(s),
and microprocessing means.

18. A security system as claimed in any of Claims 11 to
30 17, wherein the control means comprises logic circuits
responsive to sensors, and/or arranged to generate
appropriate control signals upon the detection of one or
more predetermined conditions signifying the existence of
an alarm condition.

35 19. A security system as claimed in any of Claims 11 to

18, further comprising one or more sensors for sensing the existence of one or more alarm conditions including the movement of the or each container from a predetermined location.

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20. A security system as claimed in Claim 19, having a movement sensor which comprises a microswitch or other pressure operated switch on the base of the container.

10

21. A security system as claimed in Claim 19 or 20, wherein a movement sensor comprises a mechanical connection having male and female parts carried respectively by the or each container or a housing therefor, and by a supporting structure for the or each container or the housing.

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22. A security system as claimed in any of Claims 11 to 21, wherein the existence of an alarm condition is sensed by vibration or movement detectors provided on the or each container or on a housing therefor.

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23. A security system as claimed in any of Claims 11 to 22, wherein the existence of an alarm condition is sensed by sensing the existence of high temperatures and/or excess noise at or in the vicinity of the container(s) or of a housing therefor.

25

24. A security system as claimed in any of Claims 11 to 23, wherein said control means is arranged to be responsive to the status of the security system and arranged either to generate warning indicators and/or to inhibit the operation of said electrically operable means.

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25. A security system as claimed in Claim 24, wherein said warning indicators comprise a visual indicator, such as a liquid crystal display or other display means, and/or a speech synthesizer or other audible warning means.

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26. A protected container for storing paper items, said protected container comprising means for connecting the interior of said container to a supply of dyeing medium, and control means arranged to be responsive to the existence of an alarm condition and in response to actuate the supply of dyeing medium to the interior of said container to dye any paper items stored therein.

27. A protected container as claimed in Claim 26, wherein at least one sensor is provided for sensing the existence of an alarm condition, and said control means is coupled to said sensor and arranged to be responsive to the output thereof.

28. A protected container as claimed in Claim 26 or 27, wherein said dyeing medium is fluid dyestuff or fluid containing dyestuff, and the supply of said fluid is pressurised.

29. A protected container as claimed in any of Claims 26 to 28, wherein said control means comprises microprocessing means arranged to receive signals from a plurality of sensors.

30. A protected container as claimed in any of Claims 26 to 29, wherein said control means comprises logic circuits responsive to sensor(s) and/or arranged to generate appropriate control signals upon the detection of one or more predetermined conditions signifying the existence of an alarm condition.

31. A protected container as claimed in any of Claims 26 to 30, wherein the protected container has one of the connecting parts of a mechanical connector, the other connecting part being provided in an external structure for

the protected container.

32. A protected container as claimed in any of Claims 26
to 31, comprising a security system as claimed in any of
5 Claims 11 to 25.

33. A method of securing paper items substantially as
hereinbefore described with reference to the accompanying
drawings.

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34. A security system for at least one container for
storing paper items substantially as hereinbefore described
with reference to the accompanying drawings.

15 35. A protected container for storing paper items
substantially as hereinbefore described with reference to
the accompanying drawings.

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Patents Act 1977

**Examiner's report to the Comptroller under
Section 17 (The Search Report)**

Application number

GB 9214487.2

Relevant Technical fields

(i) UK CI (Edition L) E2X

(ii) Int CI (Edition 5) G08B

Databases (see over)

(i) UK Patent Office

(ii)

Search Examiner

A H MITCHELL

Date of Search

7 SEPTEMBER 1993

Documents considered relevant following a search in respect of claims 1-35

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2019625 A (KEY)	1, 11, 26 at least
X	GB 1593041 (CEDERGREN)	1, 5, 8, 11, 12, 26 at least
X	GB 1576567 (ERICSSON)	1, 11, 26 at least
X	GB 1450397 (THORNE)	1, 11, 26 at least
X	WO 83/03872 (CEDERGREN)	1, 11, 26 at least
X	WO 80/00887 (INNOVATION)	1, 11, 26 at least
X	EP 0473471 A1 (FICHET) note ATM reference	1-3, 11, 26 at least
X	EP 0347091 A2 (TRANSALARM)	1, 11, 26 at least
X	EP 0277679 A1 (SECULOCK)	1, 11, 26 at least

Category	Identity of document and relevant passages	Relevant to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number

GB 9214487.2

Relevant Technical fields

(i) UK CI (Edition) Contd. from page 1

(ii) Int CI (Edition)

Databases (see over)

(i) UK Patent Office

(ii)

Search Examiner

A H MITCHELL

Date of Search

7 SEPTEMBER 1993

Documents considered relevant following a search in respect of claims

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	EP 0241322 A1 (BOUTROY)	1, 11, 26 at least
X	EP 0232632 A1 (BULL) note the cash dispenser references	1-3, 11, 26 at least

Category	Identity of document and relevant passages -23-	Relevant to claim(s)

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A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).